ON THE RESOURCES, PRODUCTIONS AND SOCIAL CONDITION OF EGYPT.

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Introduction.

The United States of America produce annually about 275 million bushels of wheat, or about 6½ bushels per capita of population. Of this amount, they consume over 230 million bushels, or about 5½ bushels per capita; and have about 42 million bushels surplus left for sale.

The United Kingdom of Great Britain and Ireland produces annually about 95 million bushels of wheat and consumes 190 million bushels, or about 5¾ bushels per capita. It has therefore a deficit to purchase, amounting to as much, of wheat, as all it produces, or 95 million bushels. Thus, England has two bushels of wheat to buy where we have one to sell.

As wheat forms the daily bread of the two countries, and, unless in exceptional or extreme cases, no substitute for it will be accepted by the people, the purchases of these vast quantities of wheat on the one side, and their sale on the other, form, naturally enough, occasions for the exercise of a good deal of what may be euphemized as commercial diplomacy. In plain English the grain trade abounds with misrepresentation, and, as it happens, at the present time, this misrepresentation has, to a certain extent, centred itself upon the agricultural resources and wheat crop of Egypt.

Treating, as it will pretty fully, upon this topic, the present paper therefore claims to possess something more of scientific value than one which might have related less directly to the affairs of our everyday life; and although this claim might pass for nothing among peoples whose lives and thoughts are more in the remote past or remote future, than the present, I trust that it does not imply too great assurance if I venture to hope that, if made good, it will lose nothing at the hands of my own countrymen, on account of this utilitarian basis.

The gist of the present dispute about Egypt is as follows: A school of British agricultural writers at the head of whom is Mr. Kains-Jackson, estimates that during the ensuing harvest year 1874-5, the United Kingdom, instead of needing to purchase, as usual, about 95 million bushels of wheat, will require but 64 to 72 million bushels; and, on the other hand, instead of having to rely, as usual, mainly upon the United States, has by reason of the present year's abundant wheat harvest throughout the civilized world, the option of purchasing as much wheat—perhaps more—elsewhere, as she will need to purchase from us.

Among the countries specified by this authority, as having this year a surplus of wheat to dispose of, are France, Germany, Russia and Turkey.

Mr. Kains-Jackson's statements with regard to the wheat crops of all of these countries, as well with regard to that of his own country, have already been shown to be excessive; while as to Turkey, he was reminded that, so far from possessing a surplus crop of wheat, the people in Anatolia were dying from starvation, literally in myriads. To this, the response has been made that by Turkey was meant Egypt, and as none of the writers upon the subject appeared to know anything more about Egypt than that it was a land of pyramids, ruined temples and "backsheesh," Mr. Kains-Jackson has remained more or less unimpeached; and our manufacturers, our shipping and our railways, all of which, as things stand, depend largely upon the prospects of the grain trade, are thought to have indicated some symptoms of distrust with regard to the prospect before them for the coming year.

Should such distrust exist, I hope that it may tend at least in some degree to dispel it, if I here express the strong conviction that it is entirely groundless, and that during the ensuing harvest year, as hitherto, in the past, our surplus wheat will find as ample and profitable a foreign market—aye, in England, too,—as can be reasonably desired, and that, therefore, neither our domestic industries nor carrying trade, by land or water, should suffer anything from the misrepresentations that have been made.

And now to Egypt.

History.

Of the ancient history of this most interesting country, I need only say that it began in the remotest past and ended with the Persian conquest about 500 years before our era. About 200 years later, Egypt became a Greek province, under Alexander, and about 300 years later still, or at about the commencement of our era, it fell beneath the arms of Rome. This was the period, when, with reference to its function of supplying the markets of the city of Rome with corn, it was called the granary of the world. It was estimated by Greek and Roman writers to have contained at its most flourishing period a population of 7,000,000. With alternately Pagan and Christian rulers, as one or the other Roman faction succeeded in obtaining control of its government, Egypt remained in an anarchical state until the year A. D. 616, when the Persians again took it. They held it for ten years and surrendered it to the Arabs, who held it for 900 years.

At length, in 1517, it was conquered by the Turks, who—not without having for a time lost it to the Marmelukes, who in turn lost it to the French—have retained it to the present time.

Thus, from the most ancient period, Egypt has been an enslaved country—a fact whose reflection can be seen at all times in the extreme misery and abjection of her people. For the continuance of this wretchedness, England—but for whose interference forty years ago, the Pasha would have liberated his country from the Turkish yoke—is chiefly responsible. When that yoke is cast off and the Pasha, deprived of his

present excuse for the tremendous exactions he imposes upon the people, is rendered clearly responsible for their condition and welfare, Egypt may for once in almost countless years breathe the air of freedom. But until then it is impossible.

Napoleon reminded his soldiers that forty centuries of historic time looked down upon them from the pyramids. Let us, of England and America, whose heritage for over 600 years has been the largest freedom, and whose boasted mission it has been to place this priceless boon within the reach of all the men of earth, remember that from the appealing eyes of this unhappy people forty centuries of suffering look *up* to us.

After the departure of the French from Egypt, the Turks and Marmelukes were embroiled in civil war. This ended with the accession of Mehemet Ali, as Pasha, in 1805. In 1811 this usurper treacherously slew 500 of the Marmelukes and since that time Egypt has been in peace. In 1848, at the age of 80, Mehemet Ali became imbecile, and his eldest son Ibrahim reigned in his stead. Ibrahim died in two months and was succeeded by his brother Abbas, a profligate. Mehemet Ali died in 1849 and Abbas in 1854. To these succeeded the fourth son of Mehemet Ali, Said Pasha, who reigned until his death in 1863, when his nephew Ismail, the present ruler, ascended the throne. Ismail Pasha, granted the title of Khédive by an imperial firman dated 1867, is the son of Ibrahim Pasha. He was born in 1816; educated at the Paris Polytechnic School: speaks French and a little English; owns or manages everything in Egypt, among the rest, it is said, 27 palaces for his personal use; lives precisely the same despotic and luxurious life that his predecessors, the Pharaohs, did, thousands of years ago; like them he surrounds himself with foreign adventurers; like the Pharaohs, too, he builds the most astonishing and useless works of art; and like them crushes his unhappy people—the great bulk of whom are of the once warlike and progressive, but now despised Arab race—crushes them to earth with a disdainful and merciless scorn that finds its only fit expression in the bastinado and death.

Natural Resources.

Egypt has but a single natural resource—the Nile. There is no other river in the country; nor has this one a branch or affluent between its mouth and the Nubian desert. Beside the almost shelterless date-palms, there are no trees; the few wooded parks planted by order of Mehemet Ali, the ornamental trees of the cities, of which it is said Cairo and its suburbs contain 40,000, and the mulberry trees raised for silk worms—scarcely deserving to be mentioned in this connection. There is little or no rain; the agriculture of the country depending almost entirely upon the irrigating canals connected with the Nile.

Number of rainy days at Cairo from A. D. 1798 to 1800, about 15 a year; from 1835 to 1839 about 12; in 1871, 9. Quantity of rain in 1835,

17 millimetres; 1838, 11; 1839, 3; in 1871, not recorded, but the rain fell altogether only 9 hours during the year. Same climate throughout all Lower Egypt; while in Upper Egypt it is nearly the same.

There is no wood for fuel or building purposes, neither is there any coal. In day-time it is often bleak; at night-time chilly; though, for the most time the temperature is warm and sometimes uncomfortably hot.

Moneys, Weights and Measures.

1 para	equal	to	$\frac{1}{8}$ of 1 cent	U. S. gold.	
1 piastre	"	"	5 cents	" "	(*a*)
1 feddan	"	"	1.0323	acres.	(*b*)
1 ardeb, measure,	"	"	5.	bushels.	(*c*)
1 " weight,	"	"	270.	lbs. avoir.	
1 oke, oque, or occue	"	"	2.205	" "	(*d*)
1 cantar, cantaro or quintal	"	"	97.023	" "	(*e*)
1 kilometre carré	"	"	0.386	sq. miles.	
1 square mile	"	"	640.	acres.	

(*a*). The U. S. Treas. Reg. 1874, p. 486, fix the value of the Egyptian silver piece of 20 piastres at $1.0039. U. S. Consul Thayer (C. R. 1862, p. 582) says, 21½ piastres equal one dollar. The Treas. Monthly Stat. Mar. 1872, say that the Egyptian copper coinage has been recently much debased, but this does not necessarily affect the value of the silver or legal tender or "custom-house" piastre of Egypt. There was debasement of the inferior coins in 1837, also.—MacGreggor.

(*b*). The Alm. de Paris, 1869, says a feddan equals about 4200 mètres carrés. As a mètre carré equals 10.7064 square feet (Craig), 1 feddan equals 44,967 square feet; and as 43,560 square feet equal 1 acre, therefore 1 feddan equals 1.0323 acres. The U. S. Com. Rel. 1873, p. 1083, says a feddan is less than an acre. The M. S. 1872, say "about 1¼ acres." Buckle, Hist. Civ. (ed. Harper) v. 1, p. 61, says 1¾ acres, and Simmond's Com. Dic. says "about 1⅛ acres."

(*c*). The U. S. Com. Rel. 1859, p. 358, and 1873, p. 1083, and the general weight of authority. On the other hand, Buckle 1, 62, says it is less than 1-15th of a bushel; Kelly's Cambist says ⅛ to ⅓; Simmonds says ⅓ to 7¾ to 9¼, while the U. S. Com. Rel. 1871, p. 1107, say an ardeb is 15 bushels! The truth is it varies in all parts of Egypt. There are the Alexandria (used in the text on account of its greater universality), the Cairo, the Damietta, the Rosetta and many other ardebs. The Cairo ardeb is 1.821 hectolitres.—MacGreggor.

(*d*). U. S. Com. Rel. 1859, p. 358. But the C. R. of 1871, p. 1107, say 2.75 lbs., and Martin's Year Book and Kelly's Cambist say 2.832 lbs. It has not been used to obtain any of the numbers in the text.

(*e*). 1 cantar or cantal equals 44 okes or 100 "rottolis" or "rolls." Kelly's Cambist and the general weight of authority. But the Com. Rel. 1859, says 100 lbs.; Kelly says 95 lbs., which contradicts his previous statement, while other authorities say, variously, 97, 98¾, 112 lbs., and other equivalents.

TOTAL AREA OF EGYPT.

[Excluding the Soudan. (*f*)]

CITIES AND PROVINCES.	AREA—ACRES.	POPULATION. CENSUS MAR. 22, '71.
Cities of Alexandria, Rosetta, Damietta, Port Said and Suez, including 83,555 foreigners		654,569
Lower Egypt, including 4,483 foreigners	160,866,560	2,615,798
Middle Egypt		599,596
Upper Egypt		1,333,442
Nubia	230,440,960	
Senaar and Meröe	130,692,480	3,238,595
Massawa, Souakin and *Taka*, Provinces on the Red Sea, say	70,896,000	
Total	592,896,000	8,442,000

EGYPT PROPER.

Egypt proper consists of Lower, Middle and Upper Egypt. It contains 160,866,560 acres of area, and a population (in 1871) of 5,203,405. It is to this country only that the following statistics appertain, the outlying provinces and protectorates being omitted, as desert or savage countries.

ARABLE AREA.

The arable area of Egypt is confined substantially to the inundable portion of the valley of the Nile. As the river closely hugs the hills and palisades on its right bank, this area is nearly altogether on its left. In some places the arable lands are eleven miles wide; in others they dwindle to a mere strip of bank. For the most part, however, this area extends westward from the river about five to eight miles, where it is terminated by the Libyan hills and desert. Every year it is extended by the rise of the river upon its own bed. This rise was found to be, at the close of the last century, 4.960 inches per century. Some thirty years ago it was computed at 5.736 inches per century. From this source it is said that about 65,000 to 70,000 feddans of area are annually reclaimed from the desert (C. R. 1873, p. 1070); but, as will presently be shown, there may be as much or more lost from other causes; the area of cultivable land depending more upon social and industrial, than natural events.

(*f*). The *Soudan* Provinces include the Valley of the White Nile to the great N'Yanza Lakes and extend across the Continent of Africa westward from Nubia and south of Sahara. Their entire area is estimated at 1,600,000 square miles (about one-half the area of the United States), and it is said to contain 14 million feddans of land susceptible of cultivation (C. R. 1873, p. 1081), and a population of 60 millions, negroes. The south-eastern extremity of the Soudan was recently taken possession of by Sir Samuel Baker in the name of the Egyptian Government. It is accessible by small steamers from the lower Nile, and a railway is projected via Khartoum and Gondokoro.

In 1833, Egypt was estimated to possess 3,500,000 feddans of cultivable land, "if cultivation were pushed to its utmost extent."—MacGreggor.

The official survey of 1843 comprised 6,984,135 feddans susceptible of cultivation; but this included the superficial surface of the Nile and canals. The cultivated, and, doubtless, the cultivable, portion (at that time) consisted of 3,826,340 feddans as follows:

Provinces.	No of Feddans cultivated.	No. of Feddans uncultivated, including Surface of Nile and Canals.
Lower Egypt	2,749,106	1,551,011
Middle Egypt	750,409	843,608
Upper Egypt	826,825	763,176
Total	3,826,340	3,157,795

The report of 1843, and also a late report of the British Consul, are so worded as to convey the impression that there is almost as much cultivable land uncultivated as there is cultivated; but this is not the fact. The so-called cultivable land, not cultivated, consists, and has always consisted, for the most part either of the surfaces of the Nile and the canals, or of lands in the Delta and elsewhere, which from various causes have become barren or unavailable.

"A perpetual struggle is carried on between the desert and cultivation. In many parts of the Delta the desert has invaded and mastered the soil."—MacGreggor, 1833.

"In the Faioum, which was formerly the most richly cultivated part of Egypt, the desert has made many inroads."—*Ibid.*

"In * * * places on the western border of the Nile Valley, the shifting sands of the desert have encroached on the domain of cultivation."—Com. Rel., 1863, p. 532.

"When the land, as has happened in Lower Egypt and the Delta, from the despotic appropriation and thriftless husbandry of * * * rulers, has become what is called *aladish*, and gone to waste, light plows (such as are used here) are powerless to improve it. Villages, for example, often deprived of laborers to furnish recruits for foreign wars, were at one time depopulated by the government, and their lands exploited (used up) by a short-sighted and ruinous system of agriculture, from the effects of which the country still suffers. In order to have an uninterrupted succession of crops, the inundation (of the Nile) was excluded by dykes, irrigation being supplied from the brackish water of wells. The deposit of salt after evaporation, added to that which would be pushed to the surface by the upward filtration of the Nile, would soon convert a once fruitful tract into a desert, where nothing would grow but a rank crop of 'halfa,' a deep-rooted, tough grass, which, with the ordinary farming implements of Egypt, it is almost impossible to extirpate. It has thus

been considered an unprofitable undertaking to attempt to improve these barren lands, raised, as they frequently are, by the deposits left by former growths of this pestilent grass above the level of inundation, and from this cause *one-half of the Delta is said to be uncultivated.*"—*Ibid.*

This alone would dispose of some two millions of acres.

"Part of the (barren) territory (now being reclaimed by the Suez Canal Company) was known in ancient times as the fruitful land of Goshen."—*Ibid.*

"A large part of the land formerly cultivated in Egypt is to-day sterile."—*Ibid.*

"In the present cotton region the land has become so poor that now only two cantars a feddan are produced where five used to be gathered. * * * There is plenty of land; it only wants moisture to make it fertile; and we would like to see a number of irrigating canals," etc.—C. R., 1866, p. 435.

The accounts are the same to the present day.

The following table shows the cultivated area at several dates, from 1812 to 1874 inclusive:

Comparative Statistics of Cultivated Area in Egypt.

YEAR.	FEDDANS.	ACRES.
1812	3,218,736	3,322,701
1833	1,856,000	1,915,950
1835	2,000,000	2,064,600
1843	3,826,340	3,949,931
1868	4,296,736	4,435,521
1873	4,624,221	4,773,583
1874	4,625,000	4,774,388

This table shows, that from the time of the accession of Mehemet Ali, to the close of the war in Syria, the cultivated area in Egypt rapidly declined. It then suddenly increased until, in 1843, it attained its former extent again. From that time to this it has slowly increased. The causes of this extraorinary movement will appear when the progress of the population has been examined.

Population of all Egypt.

(Excluding the Soudan.)

YEAR.	ESTIMATED POPULATION.	AUTHORITY.
1862	7,465,000	Dr. Schnepp.
1871	8,442,000	Dr. Wagner.

The Almanac de Gotha for 1873 gives the population, at a recent date, at 8,000,000, and appears to quote Mr. E. de Regny, the official statistician of Egypt, for authority.

Population of Egypt Proper.

YEAR.	POPULATION.	AUTHORITY.
1812	3,000,000	Estimate.
1820	2,500,000	Morse's Gazetteer.
1833	2,000,000	MacGreggor.
1844	3,350,000	Alm. de Gotha.
1847	4,542,620	Census.
1859	5,125,000	Census.
1863	4,709,116	Com. Rel., 1873.
1866	4,848,528	Br. Con. Ret., 6–1867.
1867	4,888,925	Com. Rel., 1873.
1872	5,203,405	" " "
1873	5,250,000	" " "

This table exhibits a decrease of population from the time of Mehemet Ali's accession, to the close of the Syrian war, similar to that shown with regard to acres of cultivated area. It likewise shows the same sudden growth immediately afterward, and even a slower growth since. These coincidences are undoubtedly due to the same causes—the wars of Mehemet Ali, particularly those in Syria; the abandonment of the country for the desert, in preference to participation in those wars; and the subsequent return of the people from the battle-fields and the wilderness. Says MacGreggor, "Almost without exception the laborers mutilated themselves by cutting off the first finger of the right hand, destroying the right eye, or pulling out the front teeth, in order to avoid the conscription," p. 231.

Comparison of Population and Cultivated Area.

If the large estates worked by the Khédive and his relatives, or the nobles of his court, be deducted, there will not remain in Egypt over one-half an acre of arable land to each person; and even if the land cultivated at present were divided equally among all, there would still be not over nine-tenths of an acre per capita. To show how comparatively small an area this is, I give the statistics on this point relative to the countries with which we are most familiar.

RELATION OF CULTIVATED LANDS TO POPULATION IN FOUR DIFFERENT COUNTRIES.

Country.	Year.	Cultivated Lands. Acres per Capita.		Cultivated Lands, including pasture and forest lands in use. Acres per capita.	
United States (*g*).....	1850	4.9	Average, 3.3	12.7	Average, 6.5
	1860	5.2		13 0	
	1870 (*h*)	4.9 (*h*)		10.6 (*h*)	
United Kingdom.....	1873	1.4		1.5	
France.....	1872	2.2		3.1	
Egypt.....	1873	0.9		0.9	

The United States is an agricultural country, which furnishes other countries with breadstuffs out of its own surplus. The United Kingdom is a manufacturing country, which has abandoned the policy of attempting to raise its own breadstuffs, and relies largely upon foreign supplies. The quantities of the latter—that is to say, all breadstuffs (not wheat alone)—usually exported by the United States, do not materially exceed those usually imported by the United Kingdom; hence an average of the amount of cultivated land per capita in the two countries shows very correctly the true amount needed to support each head of population. According to the table above, this average is over 6½ acres. In France, which imports breadstuffs as often as it exports them, and whose population and means of subsistence are running a close race, the average number of acres to each head of population is over three. Imagine how small, then, must be the portion of an Egyptian laborer, who, if even he had a fair share of all the cultivated land in his country, which is far from being the fact—who, if that land were as productively tilled as are the lands of the other countries named, which, as will be presently shown, is not the case, and who, if all the food-products of that land were kept at home instead of being shipped abroad, as a large portion of them are, would still possess but one-seventh the heritage of an American or Englishman, and but one-fourth that of a Frenchman.

RURAL AND CIVIC POPULATION.

There are few towns in Egypt beside those already specified. Among them is Syout, with a population estimated in 1874 at 25,000 (Contemp. Rev., Feb. 1874.) The total civic population of Egypt is estimated at

(*g*) The lands classified in the United States census as "improved farm lands," are treated above as "cultivated lands," and the "unimproved farm lands" as "pasture and forest lands in use," as adjuncts to agriculture. "No farm of less than three acres, not unless $500 worth of produce has been sold off it during the year," is included in the United States census returns—a very absurd and misleading exception.

(*h*) The United States census of 1870 was the worst ever taken, and is palpably deficient in almost every respect. The census of 1860 is much more complete and reliable.

700,000, or 13 per cent. of the whole, leaving the rural population to consist of 4,503,405, or 87 per cent. of the whole.

Occupations.

There are no manufactures in Egypt except those owned and managed by "the government," or, in other words, Ismail, son of Ibrahim. The principal ones are the two cotton cloth factories which supply the coarse white cotton clothing used by the soldiers, and the blue stuff of cotton and wool worn by the peasant women. One of these is at Boulac, the other at Choubra, near Cairo. Together they employ 1,438 workmen, and produce annually $122,970 worth of cloth and $13,740 worth of linen —an average of $95 per workman. There is a manufactory of tarbooches (these are the national cap) and carpets at Fueh; a printing establishment at Boulac for Turkish and Arabian works, which employs about 150 workmen; a paper-mill at Boulac, which employs 50 workmen, and produces annually 350 cantars of wrapping, and 66,500 reams of printing, writing and colored papers; two gunpowder-mills worked by mule-power, near Cairo; several large bakeries at Cairo, which together consume about 800,000 barrels of flour per annum; and some other small works.

These, with the salt-works monopoly, which turns out some 360,000 bushels of salt per annum; the fisheries, which employ 3,760 persons on salt, and about 6,000 on fresh, water; seventeen short railways and branches; the telegraphs, the Nile steamboats, and a few navigable canals, are all the industrial works in Egypt, unless the manufacture of native sugar and ginning of native cotton are included in the same category. They are all owned and managed by the Khédive, who, by thus engrossing all the branches of trade, effectually crushes native, and shuts out foreign, capital and enterprise. Mehemet Ali made strenuous efforts to become a cotton manufacturer, and at one time had 44 factories and 20,000 operatives, consuming annually 30,000 cantars of cotton, at work; but the enterprise was abandoned.

A considerable portion of the persons employed in the present industrial works in Egypt are foreigners; even the fisheries, employing many Maltese, Greeks and Italians. The number of those employed in agriculture, including their families, is estimated at 4,400,000, or about 85 per cent. of the whole population—a number and proportion nearly identical with those of the entire rural population.

Size of Farms.

The Viceroy, or Khédive, and his family cultivate one-fourth of all the arable land. A farm of the late El Hami Pasha consisted of 39,368 acres, of which 13,344 were let. There are other large estates. The holdings among the fellahdeen, or peasantry, range from one-eighth of an acre to one acre in size.

Land Tenures.

Theoretically, all lands were held of God by the Sultan of Turkey. In Egypt the Viceroy stood in place of the Sultan, and had power to grant

tenancies in fee, estates for life or a term of years, metayerships and other tenures, except to the mosques, which held directly from the Sultan.

But Mehemet Ali simplified all this by seizing the lands of the mosques, confiscating all the private titles, and appropriating the entire land and its people to his own use. Certain nobles and foreign adventurers have since been allowed to obtain doubtful tenures of the land, the basis of which is, however, in all cases, the Khédive's will. The portions not managed directly by the latter and his beneficiaries are cultivated by the wretched fellahdeen, and held, properly speaking, by no tenure except that which naturally attaches itself to compulsory service.

The Turkish laws of succession, designed by Mahmoud II. and Abd-el-Mejeed to put an end to the great feudatories which existed in their days, imperatively command equal subdivision of land among the heirs of the first degree in descending or ascending line, male and female alike; failing these, in collateral line, etc. Entails were abolished; transfers of real estate were to be made by entry at a public registry, and the transaction heavily taxed; private deeds between the parties were not to be recognized. How far these regulations have been applied in Egypt it would be difficult to say.

System of Culture.

The system of culture hardly deserves the name, and simply consists of waiting upon the annual overflow of the Nile to fill the irrigating canals, and when the river has subsided, of maintaining the level of the canals and reservoirs by pumping, baling and ladling. This last-named work and "the digging of fresh canals engross the labor of the people for months," writes the British consul, Mr. Stanley, in 1873. Without this incessant struggle with nature, the lands would become uncultivable, and even with it the result is doubtful; for if the next overflow of the river exceeds thirty feet in height, everything on the land is demolished and swept away; while if it falls short of eighteen feet, the harvests fail and famine ensues. Of the 66 inundations between 1735 and 1801, 11, or 17 per cent., were high and devastating; 16, or 24 per cent., were feeble; 9, or 14 per cent., were insufficient; and only 30, or 45 per cent., were good. The chances, then, appear to be about even, as to whether, after all his labor, the Egyptian gets a harvest or not. Such a system does not admit of fallows, rotation or manuring. The irrigating canals or reservoirs of the large estates are supplied with water from the river by steam power, the coal being imported from England; but for the most part this work, and the digging and dredging of the canals, ditches and reservoirs, are done by hand, and with the rudest implements.

Sometimes two, three and even four *shadoufs* or baling machines are placed close to each other and employed to raise the water by the pitcherful at a time, to as many reservoirs at different elevations, until it reaches the highest. Each *shadouf* requires two men to work it. "During many months of the year the whole Arab population appears to be engaged in bringing water from the Nile to the adjacent fields."—MacGreggor.

The total number and kinds of machines now in use for the purpose of irrigation will be shown further on.

The Nile usually rises late in May. In August it reaches such a height that the canals are opened, the entire valley is soaked and the reservoirs are filled with water. It continues to rise until October, and then falls so rapidly that, in some parts, pumping and baling commence in November or December; though, in others, not until February, when they continue until May or June.

Fertilizers.

As a general thing no fertilizers are employed; the deposits of mud left by the river during its overflow being the main dependence of the husbandman in this respect. An analysis of this mud gives the following results: silica 53.04; sesquioxide of iron 18.43; sesquioxide of alumina 8.76; carbonate of lime 4.19; sulphate of lime 0.75; lime 2.25; magnesia 0.66; potassa 0.69; soda 2.16; chloride of sodium 0.04; organic matter 9.03; total 100 per cent. Owing to the extreme scarcity of trees and entire absence of coal, fuel, for all purposes, is exceedingly dear. For this reason animal manure, and during the cotton excitement 1862–1867, even cotton-seed, the price of which had at former periods exceeded that of wheat, were used for fuel; and the former continues to be thus employed yet. Cotton-seed, however, degenerates so rapidly in Egypt that, except for this purpose, or the superior ones of extracting oil from it or using it for cattle fodder, it possesses little value there, unless it is freshly imported from other countries. The Khédive has promised a large pecuniary reward and the title of Bey to whomsoever shall discover paying deposits of *coal* in Egypt.

On the sugar estates the culture exhausts the earth so rapidly that pigeon-guano is largely used to enrich it; about half a ton being employed to the acre of land. In order to obtain this fertilizer the keeping of a flock of pigeons is part of the fellah's duties to the state. The birds are simply provided with the shelter of a mud-cote and left at liberty to provide their own sustenance. This, of course, is derived, one way or another, from the fellah's corn-field, and in this way the birds constitute an additional agency of taxation upon the wretched peasant. About 267,000 tons of this guano are now annually produced in Egypt.

In justice to the Egyptian system of agriculture, it should be stated that there *is* a certain rotation of crops observed, but unlike any other system known, except that of the despotic President Lopez, who runs a government in South America which is somewhat ironically styled the "republic" of Paraguay, the order of that rotation is governed altogether by the will or caprice of the Khédive. Rice and maize used to be largely cultivated in Egypt; but the government ordered wheat to be planted in their stead and the latter became the principal exporting crop. It was grown one year after another, until nature gave out and the grain grew so poor that it could scarcely find a market. That exported to England

was used only in the distilleries. The American war occurring at this juncture, the government prohibited the cultivation of wheat and nominated cotton in its place. The culture of this staple was pursued until the fall of prices occurred after the war, when it was superseded in turn by sugar, which is the present favorite. The exports from Alexandria, the shipping port of the country, which will be given further on, will furnish a close guide to the fluctuations in the product of these articles, occasioned by this capricious, ruinous, and sometimes mortal policy.

Seeding.

The seed is thrown broadcast, the use of the drill being wholly unknown. About $3\frac{1}{2}$ bushels of wheat are sown to the acre, the produce being $11\frac{1}{4}$ bushels, or scarcely more than 3 for 1. Even ploughing was formerly dispensed with in many parts, the seed being thrown upon the mud left by the receding river, and domestic animals turned loose to trample in the grain. This and other wretched features of Egyptian agriculture are giving way before better methods. The cotton and sugar-cane which now constitute the chief products of the country, are cultivated mainly by the large proprietors and sown, or planted, as in the United States.

Domestic Animals.

Previous to the cattle disease in 1863 and 1864 which destroyed in a single year 800,000 head of horned cattle, and, in Lower Egypt, nearly every other animal also, and which, together with the cotton mania of that period, contributed to occasion the famine of 1865, the number of domestic animals must have exceeded one million. At the present time it barely amounts to two-thirds of that number, as follows :

Horned cattle (including buffaloes, the main dependence of the peasant for the work of the farm)	292,100
Horses	18,203
Mules	2,105
Asses	94,641
Camels	35,578
Sheep	172,657
Goats	23,907
Total	639,191

These numbers do not include the animals in Alexandria and Cairo. During the year 1872 there were imported at Alexandria 14,185 head of cattle and 200,087 sheep, chiefly for slaughter.

In 1871 the average prices of 71,400 animals sold at the fairs of Tantah in the Delta, were reported by the American consul as follows : Cattle $200 each ; buffaloes $175 ; camels $200 ; horses $100 ; asses $25 ; and sheep $6.25. (Doubtful.)

Wages.

In common with many European and all Oriental countries, women in Egypt are employed in field labor. The following were the prices of labor current at four different epochs. Men's wages per diem are always meant unless otherwise specified.

Year 1837.

Field laborers	Lower Egypt	$0.02¾ @ .05
	Upper "	.02½ @ .02¾
Boys and girls, sugar plantation		.01¼ @ .03

Year 1841.

Laborers, at Cairo, average	.05
Keepers, or gang-leaders	.10

Year 1863.

Night operative in cotton-gin at Mansurah	.24½
Day operative, same work, boy or girl	.12
Laborer on Suez Canal	.20

This was the period of the cotton mania. The American consul, writing at the time, said, "within a year wages have been doubled."

In 1865 the American consul reported that there had been an important rise in wages in late years, mainly due to the redundance of specie caused by the high prices at which cotton sold.

In 1867 the British consul reported that "wages and land had quadrupled."

Between this period and 1873 there seems to have been a fall in wages.

Year 1873.

Field laborers	Lower Egypt,	.15
	Middle "	.10
	Upper "	.07
Unskilled operatives in factories and at salt works, according to age and ability, 15c. @ 40c. per diem, average		22½
Mechanics, such as masons, carpenters, blacksmiths, etc., without board or ration		.60 @ 1.00

The American consul reported in 1873 that wages appear to have declined since the cotton mania, but that they are said to be now rising again.

Efficiency of Labor.

An Egyptian laborer is considered to have done a good day's work when he picks 15 to 18 pounds of cotton. The American negro slaves usually picked 50 pounds in the same time. An Egyptian with the aid of a *shadouf* (pole and jar, or bucket) can raise for irrigating purposes an average of about seven gallons of water per minute; an American with an improved hand pump can raise 100 gallons per minute, or 14 times as much. The constant use of the stick and bastinado is necessary to keep at work the fellahdeen on the Khédive's estates (C. R. 1871). This fact

may, however, be due to other reasons than mere physical infirmity. The immediate labor of about 15 persons out of every 100 in the United States produces more than enough food for all; whereas in Egypt the same result calls for the immediate labor of at least three times as many persons; while the result itself is greatly inferior in quantity, quality and variety.

That this great comparative inefficiency of Egyptian labor is due less to natural inaptitude than to poor food, rude implements and other circumstances over which he has no control, is manifest from the recorded observations of very intelligent persons.

Says MacGreggor, writing of Egypt, "The Arabs, if brought young to the cotton factories are of quick intellect and easily learn any branch of the trade." * * * "They show considerable dexterity."

Says Dr. Rüppel: "The young Egyptians show great skill and often surpass their masters in cleverness."

Taxation.

The tax system of Egypt is contrived to keep its unhappy people precisely at the point where it is a matter of the utmost unconcern to them whether they live or die. It is impossible to ascertain what this burden amounts to in money, but substantially, it deprives the population of all the fruits of their industry, leaving them but a bare and most wretched subsistence, without lands, homes, clothing, security, justice, or education —and, but for dates and dourra, even without food. The peasant's home is far less comfortable than that of some wild animals—for instance, the beaver. It is of the same character as the latter—a mud hut—and teems with vermin. Great numbers of the people live in the ancient tombs, with darkness and the bats.—Stephens' Travels 1837. The dress of the people hereabouts (at the First Cataract, the confines of Egypt proper and Nubia) consists of a piece of leather about six inches wide, cut in strings and tied about their loins. I bought one from a young girl of 16, whose sweet mild face and exquisitely charming figure the finest lady might have envied.—*Ibid.*

Men are seized in the streets, the bazaars, anywhere, "the iron bands put around their wrists, the iron collars around their necks," and forced to work for the Pasha.—*Ibid.*

"People are taken away in gangs from their own ground to do work for powerful land-owners, which in no wise benefits their districts." —British Consul Stanley, 1873. "A man was convicted of stealing an amber mouth-piece from Abbas Agga. His punishment was to be bound to a cannon and blown to atoms. The same official pressed 600 fellahs into his service to dig him a canal; made them work 12 hours a day; lashed them unmercifully, and did not pay them a single para."—Dr. Holroyd's Travels, 1837. The Koran is the only book in the land and that it is considered sacrilegious to print. Those few who can read and write are called fickees or saints.—*Ibid.* The people are strictly temperate, exceedingly docile and naturally intelligent.

In 1837 the *miri* or land tax was from $1.75 per feddan per annum on ordinary lands, to $5 on sugar lands. It is at present, 1874, about $5 per feddan on all lands. Beside this, there is a poll tax; a tax on date trees, which, as elsewhere explained, is equivalent to an additional poll tax; octroi taxes on the principal articles of consumption; tolls to support the irrigation canals; taxes on the fisheries (one-third); on salt; on the consumption of wheat ($1) and barley, beans, Indian corn, and pulse (75 cents per bushel in 1837); import and export duties; monopolization of all the branches of industry by the government; forced service; debasement of the copper coinage and every other device of a vicious and merciless finance. Beside these, there are dues to the mosques and various local exactions.

The total revenues of the Viceroyalty in 1821 were about $6,000,000; in 1833 about $12,500,000; in 1850 about $20,000,000; in 1872 about $36,500,000. This last sum is equivalent to 10 cents per day for every family in the country, or the whole value of the labor of every father, or head of family. The same rate of taxation—that is, the whole value of one man's labor exacted from each family in the land—were it possible in the United States, would amount to 8,000 million dollars per annum, or four times the whole sum of the national debt. But thank God, it *isn't* possible.

The taxes are raised in Egypt through a *Sheik-el-belled* or head of village commune, chosen by the people and against his will, for although armed with arbitrary power, should he fail to collect the heavy tribute, his life is generally forfeited. The government sends him in chains to the Southern frontier and he is seldom heard of again.

Interest.

The Mahometan law, like the canon law of Christianity and the ancient Jewish law, forbids the taking of interest; but like those laws, it has fallen into disuse in this respect. In 1837 the Viceroy allowed 6 per cent. for advances to him from European houses.—MacGreggor. At the same time the market rate for money among mercantile houses in Egypt was 10 to 18 per cent. per annum. At the present time the rate of interest ranges between 10 per cent. on the most desirable class of government securities, to 60 and even 100 per cent. per annum on fair commercial risks. These excessive rates appear to result less from high profits than great insecurity and the lack of a basis of individual right for an administration of justice. The prevailing insecurity is susceptible of being illustrated by four striking examples. 1st. The tenure of lands is merely the will of the Viceroy. 2d. In 1866 the Viceroy informed the European resident creditors of the rural population that, in future, it would be useless for them to claim against the natives.—Br. Cons. Rep. 6–1867, p. 296. 3d. In 1864, though gold was at that time pouring into the country to pay for cotton, so overwhelming was the general instinct to hoard and bury money, that little or none of it remained in circulation. "On one

occasion, when the French packet from Marseilles arrived in the afternoon with seven millions of francs in specie, I was informed by the agent of the company, the same evening, that he had reason to believe that not a single coin of the whole amount had remained in Alexandria. It had been taken to the villages where it is generally buried in the earth."—Com. Rel. 1865, p. 484. 4th. The monopolies. In 1864, during the high price of cotton, the Viceroy refused permission for the cotton of other cultivators to be brought to market until his own was first shipped.—*Ibid.* In 1865 and 1866, though there was a famine in Egypt, corn fetched a higher price at Jidda, in the Hedjaz, a province of Arabia on the Eastern coast of the Red Sea. The merchants, who hastened to ship corn to Jidda, were stopped by the Viceroy; who, disregarding the famished condition of his own people, hastened to sell his corn to the Arabians and obtain the higher prices which necessity compelled them to offer.—Br. C. R. 6–1867, p. 134.

The following quotations exhibit the rates of interest current in Egypt of late years.

1863. Three to five, and even seven, per cent. a month was paid by fellahs to the Levantine traders who lent them money wherewith to pay their taxes. Same year, five to ten per cent. a month was paid on good security.—C. R., 1863.

1864. "Minimum rate, ten per cent. per annum. Two and three per cent. a month often paid by parties of the first position for temporary loans."—C. R., 1864 and 1865.

1872. Seven to ten per cent. per annum on government securities.—M. S., 1872.

Agricultural Implements.

On the estates of the Khédive and other large planters, modern implements are in use; but the natives appear to be so ill-fed as to lack the physical strength and skill to wield them. Hence their reluctance to work on these estates, and the cruel practice of forcing them by blows; for, as things go, the Khédive pays them well. (C. R., 1871.) In 1862–3 the Khédive employed steam irrigating machinery in Upper Egypt. At the same time there were in operation eighty steam cotton-gins; steam pumps were used by other large proprietors, and steam plows were tried on the barren "halfa" lands of the Delta. (C. R., 1863.) Since that time, other improved implements have come into use on the same class of estates; but the peasants continue to employ the antique and inefficient implements common to the Orient from the most ancient times, the causes for this preference being poverty, physical infirmity and, above all, political insecurity. These implements consist of the plow, which is merely a crooked stick, sometimes barbed with iron; the mattock, the hoe, the spade, the *dulab* or hand-gin for cotton, and the *sakye* or *sakia*, the *chadouf* or *shadouf*, and the *tabout*, for irrigating purposes. The *sakye* is a horizontal wooden cog-wheel, turned by oxen and working into the perimeter of a vertical wooden cog-wheel, which, in revolving, elevates

an endless rope chain, to which are attached earthen jars. Filling with water at the bottom of the well or shaft, these jars empty themselves at the top as they begin to descend.

The *shadouf* is an upright forked pole in which turns a beam with a bucket or jar at one end and a lump of mud to balance it at the other.

The *tabout* is a basket, to be handled by two men, and only used when the water is to be raised but a few feet. The number of the various implements used for irrigating purposes in 1873 was as follows:

Steam-pumps	476
Sakyes (*i*)	30,084
Shadoufs	70,508
Tabouts	6,926
	107,994

Chief Articles of National Diet.

Dates and dourra constitute the chief dietary of Egypt. It is a remarkable fact that the number of date-trees under cultivation has generally coincided with the number of inhabitants and the number of acres of cultivated lands. The causes of this correspondence with reference to the number of date-trees are doubtless the coincidence of their period of bearing with the ordinary duration of a man's life, and their yield of fruit with the capacity of man to consume it, which for each tree and each man is alike one pound a day. These circumstances combine to render the tax, (now yielding about $700,000 per annum) which is placed upon date-trees, really a tax on polls, of both sexes and all ages, amounting to about 14 cents per capita.

There are now about 5 million date-palm trees in Egypt. The trees are raised by shoots, arrive at their vigor in about 30 years, and continue so for seventy years afterward, bearing yearly fifteen or twenty clusters of dates, each of them weighing fifteen or twenty pounds. After this period they begin to decline. Upwards of 200 trees are sometimes planted on a single acre (Buckle, 1, 61). Wilkinson, from whom Buckle quoted, said 400 to a feddan. Accepting the lower number as nearer the truth, it would follow that 25,000 acres of land are devoted to the growth of date-palms in Egypt. The average annual yield in 1873 was four cantars of dates to each tree (C. R,, 1873, p. 1086). This would make the aggregate yield about 20 million cantars. All but 30 thousand cantars, or one-sixth of one per cent., which is the amount annually exported, are consumed in the country. Dates are not used for human food alone, but

(*i*) The number of *sakyes* in use in 1838 was estimated at 50,000, costing ¾ million dollars a year to work them, the power employed on each machine being that of two cattle and one man (C. R., 1833, p. 533). In 1837, for want of pruning-hooks or knives, the fellahdeen engaged in cultivating cotton in Upper Egypt, broke off the branches instead of cutting them; while for want of a press, the bale of cotton was packed with the foot (MacGreggor). The absence of so common an instrument as a knife is due to the fact that the government prohibits the bearing of arms by the populace. The prudence of this precaution is evidenced by the following extract from Stephens: "Speaking of the general poverty of the Arabs, the Sheik said that if one-fourth of them owned a musket, one charge of powder and one ball, before morning there would not be a Turk in Egypt."

are also fed to horses, asses, camels, sheep, fowls and dogs, the animals consuming all the abortive fruit, and even the date-stones, when softened in water and ground up, the latter being often collected for the purpose by indigent persons. The young shoots of the date-palms are used as a delicate vegetable, resembling asparagus; the leaves afford couches, baskets, bags, mats, brushes, etc.; the trunk affords wood for fences, fuel, etc.; the fibrous part, cordage and thread; the pith, starch; and the sap, a fermented liquor.

Dourra (*j*), indian-corn, blé turc, millet, soighum (*S. vulgare*), or Guinea corn—for it is known by all these names—is a species of *holcus* (allied to broom-corn, etc.), and the principal grain of Egypt next after wheat. Varieties of this grain are grown in Africa and Asia, and it has been tried in Pennsylvania, Massachusetts, California and elsewhere in the United States, for use as cattle-fodder, but abandoned (except in California, where its cultivation was only begun a few years ago) in favor of oats or barley. Next to dates, it forms the staple food of the Egyptian peasant, and in Upper Egypt and Nubia particularly. Indeed, in Nubia it is used for the purposes of currency. Wishing to prove the prolificacy of dourra, and quoting Hamilton's *Egyptiacæ*, Buckle says (vol. 1, p. 62) that "it yields to the laborer a return of 240 for 1." It is possible that a single grain will yield a plant bearing 240 grains; but this degree of prolificacy is exceeded by maize and many other cereals. Therefore, taken by itself, this fact means nothing. But if Hamilton meant that the average yield of large areas sown in dourra is 240 for 1, which is what Buckle took it to mean, this statement is as wild as his other, that an ardeb is 16 bushels. Nor does it signify, in this connection, that, to quote another author (Appleton's Encyc. Art. *Millet*) a bushel of millet has been grown on six square rods of land, which is equal to $26\frac{2}{3}$ bushels to the acre. The practical fact is, that in Egypt, at the present time, dourra yields on the average about 12 bushels to the acre (the C. R., 1873, p. 1085, say $2\frac{1}{4}$ ardebs per feddan), or somewhat more than wheat in the same country. Its preference to the latter is doubtless due either to the lesser amount of seed and care required in its cultivation, or to the lesser trouble required in its preparation for use. It is ground between two stones and made into a brown bread, said by an enthusiastic traveler to be of "admirable quality" (Contemp. Rev., Feb. 1874), but is greatly deficient in flesh-forming materials. Hamilton says, that "in Upper Egypt the dourra constitutes almost the whole subsistence of the peasantry;" but this is so far from being correct, that they eat several pounds of dates to one of dourra. Although its use in Egypt is less common as one proceeds from Nubia to the Delta, it is nevertheless still largely consumed in Middle Egypt. The lotus, which was used for food in the time of Herodotus, is now almost a rare plant.

Beside dates and dourra-bread, the food of the Egyptian peasants consists largely of beans and lentils, which are made into soups and other

(*j*) Spelled variously, as dourra, dourrah, dhourra, dhurra, dourah, dowrah and durr

dishes. A very little fish is obtained, but no meat, except on rare occasions, when a sheep is slaughtered and consumed, even to the entrails. The total cost of an adult peasant's subsistence in 1837 ranged from 1 to 2½ cents per day. It is now, 1874, 3½ to 7½ cents. So effectually does the government deprive the people of the means of subsistence, that says MacGreggor: "If the poor fellah does not secrete some of his produce, it sometimes happens that *nothing* is left him at the conclusion of autumn to maintain himself and family through the winter."

Navigable Rivers.

The Nile is navigable by light draught boats from its mouths to the rapids or cataracts, about 600 miles above. The draught of water in the Rosetta mouth is five feet, and in the Damietta, eight feet, at low tide. During the inundation, the draught is often forty feet, and large vessels can ascend to Cairo.

Navigable Canals.	Miles long.
Mahmoudy, Lower Egypt	50
Ismaïlia, " "	61
Beherah, " "	30
Ibrahimieh, Upper "	93

Beside these, there is the Suez International Ship Canal, 69 miles long; the Bahr Yusuf, or ancient irrigating river of Joseph, some 300 miles long; and hundreds of irrigating canals, many of them of great size, not to count innumerable runnels and ditches, for the purposes of irrigation.

Railways.

The following table shows the progress that has been made in railways in Egypt:

Year.	Miles.
1863	245
1871	654
1873	736½

In 1873 there were completed twenty-one railways, aggregating 736½ miles, of which about 200 miles were double track; also, in progress, 208 miles and a single railway of 600 miles to the Soudan.

But with all this progress, says British Consul West, in 1867, "the trade of Suez is on a most limited scale, and is almost exclusively confined to the supply of the daily wants of its few inhabitants. The imports from the Red sea or from India are all on account of the Cairo merchants, and the goods are received here by native wakeels, or agents, simply as forwarding agents. The duty is paid on them, and notwithstanding the line of railway between Cairo and Suez, they are transmitted not unfrequently on camels!"

The Consul explains that there are several reasons for this singular preference, neither one of which is creditable to the existing government, which not only lords itself despotically over the people, but owns, monopolizes and administers the railways.

First. "The natives avoid coming into contact with the government officials," who manage the railways.

Secondly. "Time is of but little object, and the saving of it, *if any, by rail*, is questionable, owing to the delays in forwarding and obtaining delivery of the goods."

Thirdly. "The rates of railway freights are so high as to make but little, if any, difference in the cost."

Though it should be remembered, in mitigation of this charge, that all of the materials, some of the *personnel*, and, most important, all of the coal for the railway service has to be imported from Europe; yet the Consul's reasons for the avoidance of the railways involve reproaches to the Khédive's system of rule, which appear to show that even with cheap fuel, railways and despotism will not work well together.

The converse of this induction, that railways need a free government for their development, is strikingly shown in the great progress which the former have made in this country, and the relative progress they have made in all countries.

When it is remembered that thousands of years ago Egypt possessed stone railways, and perhaps also wooden ones, it is rather a dark stigma on the Khédive's rule that, with all his efforts to imitate European progress, the government he has established is so distasteful to his people, that rather than employ his boasted engines of progress, they find it preferable to return to the camels and the old paces and slow ways of their forefathers.

Of telegraphs there were in 1863 about 360 miles, and in 1873 about 3,460 miles. These works all belong to the government.

Rates of Freight.

In 1863 the freight on baled cotton by railway from Mansurah to Alexandria, a distance of about 100 miles, was 48 cents per cantar, or, say, 55 cents per cwt. Rates of freight from Alexandria to Liverpool in 1873, for wheat and beans 61 cents @ $1.34 per quarter of 8 bushels; to Marseilles, 60 cents per 100 kilos., or, say, 17 cents per bushel.

Having now very fully examined Egypt's resources, natural, artificial and human, we turn to the practical results of these means and forces, which are summed up in her

Agricultural Products.

In 1834 the produce of Egypt was stated to Dr. Bowring as follows:

Wheat, bushels	3,144,500	Sugar, cwts	32,000
Beans, "	2,648,000	Cotton, "	206,000
Lentils, "	231,700	Flax, "	55,000
Barley, "	1,853,600	Saffron, "	3,500
Maize, "	529,600	Tobacco, "	100,000
Dourra, "	2,813,500	Hennah, "	30,000
Chick peas, "	165,500	Indigo, lbs	212,575
Lupins "	115,850	Silk, "	178,750
Helbeh (*k*) "	364,100	Opium, "	41,250
Rice "	450,160	Linseed, bushels	198,600

(*k*) A seed with a somewhat bitter taste, whose flour is mixed with dourra.

The quantities in the above table are obtained by reckoning 3.31 Cairo ardebs to the bushel and $2\frac{3}{4}$ pounds to the oke. The cwts. are as stated in the original.

In 1873 the products, feddans cultivated, average yield per feddan and total yield were as follows:

Products.	No of Feddans Cultivated.	Av. yield per Feddan.	Aggregate yield.
Cotton, cantars (1871)	718,997	$2\frac{3}{4}$	1,977,242
Sugar (*l*) "	200,000	(*l*) 30	6,000,000
Wheat, bushels	711,000	$11\frac{1}{4}$	7,998,750
Dourra, "	400,000	$11\frac{1}{4}$	4,500,000
Barley, Rice, (*m*) Maize and other grains, bushels	89,000	$11\frac{1}{4}$	1,001,250
Oats, bushels	1,200,000	$12\frac{1}{2}$	1,500,000
Beans and lentils, bushels	1,070,000	2	2,140,000
Dates, cantars	25,000	800	20,000,000
All other, including Mulberry trees, (*n*) Rose-trees, (*o*) poppies, etc	210,224		
Total	4,624,221		

From the above table and the comparative statistics of the exports of cotton and sugar from Egypt, it appears that at the present time the government is encouraging the production of these articles in the place of wheat, and since the area of cultivation is limited, it follows that the product of the latter will be less and less every year. But taking the wheat product at its utmost, what does it amount to? A product of 8,000,000 bushels a year, (*p*) of which 5,000,000 bushels are exported, chiefly to England. In point of fact, however, there have been but six years during the past twenty, when the exports have amounted to as much as 5,000,000 bushels per annum, and there will probably never be another—at least in our days. These years were 1854, 1855, 1856, 1858, 1862 and 1868. In 1864, 1865, 1866 and 1870, there were no exports, on account of famine. In fact, Egypt imported wheat in those years. Last year, 1873, the exports were only $2\frac{1}{2}$ million bushels.

(*l*). This statement of the yield of sugar must be accepted with caution. It is given on the authority of the American consul, but the same authority says that the total product of 1872 was but 1,500,000 cantars. The production of this article is being pushed by the Khédive and more land devoted to it each succeeding year. There are 17 factories in Upper Egypt, capable of turning out 2,350,000 cantars of sugar per annum, and 5 others were building in 1873, with an aggregate capacity of 900,000 cantars.

(*m*). Rice was formerly the principal grain exported from Egypt, but its cultivation began to decline some 50 years ago.

(*n*). There were 10,000 feddans in Mulberry trees in 1837, with 300 trees to the feddan.

(*o*). Mainly in the Faioum.

(*p*). It was about 7,500,000 bushels some ten or fifteen years previously.—Appleton's Encyc.

Conclusion.

When it is remembered that the wheat trade between the United States and Great Britain is an export of 42 million bushels a year from the former, to help supply a demand of 95 million bushels a year on the part of the latter, the utter insignificance of Egypt in this respect and her inability to supply such a material portion of this trade as is likely to have the slightest appreciable effect upon its course or prices, is believed to be evident without any further argument.

Appending, first, the commercial movement of wheat, I will close with a few words relative to the government and the future material welfare of Egypt.

Commercial Movement.

Year.	Exports of Wheat from Alexandria, Bu. (5 to 1 ardeb.)	Received in the United Kingdom Bushels of 56 lbs.	Exports to France. Bushels. (5 to 1 ardeb.)
1833 (*q*)	300,000		
1841 (*r*)	2,493,985	116,430	93,225
1853	4,828,965	3,101,850	
1854	5,078,430	2,625,176	
1855 (*s*)	8,374,260	3,789,422	652,205
1856	7,807,240	4,633,226	
1857	3,762,865	1,770,046	
1858	5,852,240	4,026,982	
1859	2,636,975	3,269,072	
1860	2,823,590	1,717,150	
1861	4,526,200	2,948,960	
1862	6,644,255	6,609,158	
1863	3,896,600	4,645,272	
1864	440,445	734,924	
1865	none (*t*)	20,126	
1866	62,690	67,662	
1867	3,991,010	2,943,512	
1868	5,735,735	6,474,760	
1869	1,844,485	2,040,578	
1870 (*u*)	74,955	213,402	
1871	2,323,345	1,817,694	205,100
1872	4,338,640	4,722,084	121,650 (*w*)
1873 (*v*)	2,500,000	2,543,588	

(*q*). In 1833 the Nile failed to overflow its banks, the harvest was greatly deficient, famine ensued and grain rose to a high price; nevertheless prices were still higher on the Black Sea, and Mehemet Ali, turning a deaf ear to the sufferings of his own people, sent 60,000 ardebs thither for sale.—MacGreggor.

(*r*). In 1841 the exports of wheat from Egypt were mainly to Italy and Turkey. The British trade did not spring up until after this date.

(*s*). In 1855 the exports of wheat were 5,573,070 bushels to Great Britain; 652,205 to France; 137,900 to Austria and 2,011,085 to other countries.

(*t*). In 1865, failure of grain crops. Exports of grain prohibited until July 31, 1866.

(*u*). In 1870, failure of grain crops. Exports of grain other than wheat: Rice 100,625, Maize 6,595 and Barley 170,265 bushels.

(*v*). Wheat shipped from Alexandria to United Kingdom 1862 to 1872 inclusive, 29,352,260 bushels at five to the ardeb. Total received in United Kingdom during same period 30,289,172 bushels of 56 lbs. each—a substantial agreement.

(*w*). 1872. Also 58,855 bushels to Italy.

No wheat is permitted to be shipped from Egypt without paying to the government an export-duty of about 37½ cents per bushel, and no laborer is permitted to leave the country at all; so that the conditions of her industry are in a certain sense fixed.—MacGreggor.

The Future of Egypt.

Apart from the subject of her agricultural and commercial *rivalry* with the United States, Egypt possesses an interest to us which I trust will furnish ample apology for the uncomplimentary terms in which I have found it necessary to advert to her government, or what is the same thing, the Khédive. Rulers have difficulties to contend with which are not always readily appreciated by others, and doubtless the Khédive has his share of them. He sees beneath him a country which demands incessant labor for its cultivation; a people, ignorant, superstitious and, as he believes, slow and lazy. His administration, bad as it seems to us, has nevertheless been one of peace, and wholly unstained by the barbarous cruelties that distinguished those of Mehemet Ali and Ibrahim and Abbas Pasha. But although, to use the expression of the illustrious Turgot with reference to the finance system of France under the reign of Louis XV., the Khédive has not "killed the goose that lays the golden eggs," he has plucked it to the bone.

Were this potentate once to reflect how little glory there is in such a course, and how many millions of suffering human creatures would bless him now and his name forever, did he change it; were he but to consider how infinitely more creditable in the eyes of the world, and more gracious in the sight of the God and the Prophet he worships would appear his devotion to the amelioration of the condition of his people, than the amassment of wealth and the building of palaces in which he is engaged, it is perhaps not too much to say that he would adopt a wholly different national policy.

That this may be the case, and Egypt afforded an opportunity to rise once more among the nations of earth—not as a land merely of archæological remains, but as the abode of a numerous and prosperous people—cannot but be the fervent wish, not only of all Americans, but of the modern world at large.